

# Louisiana Believes

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2020-2021 Important Prerequisite Math Standards  
Secondary

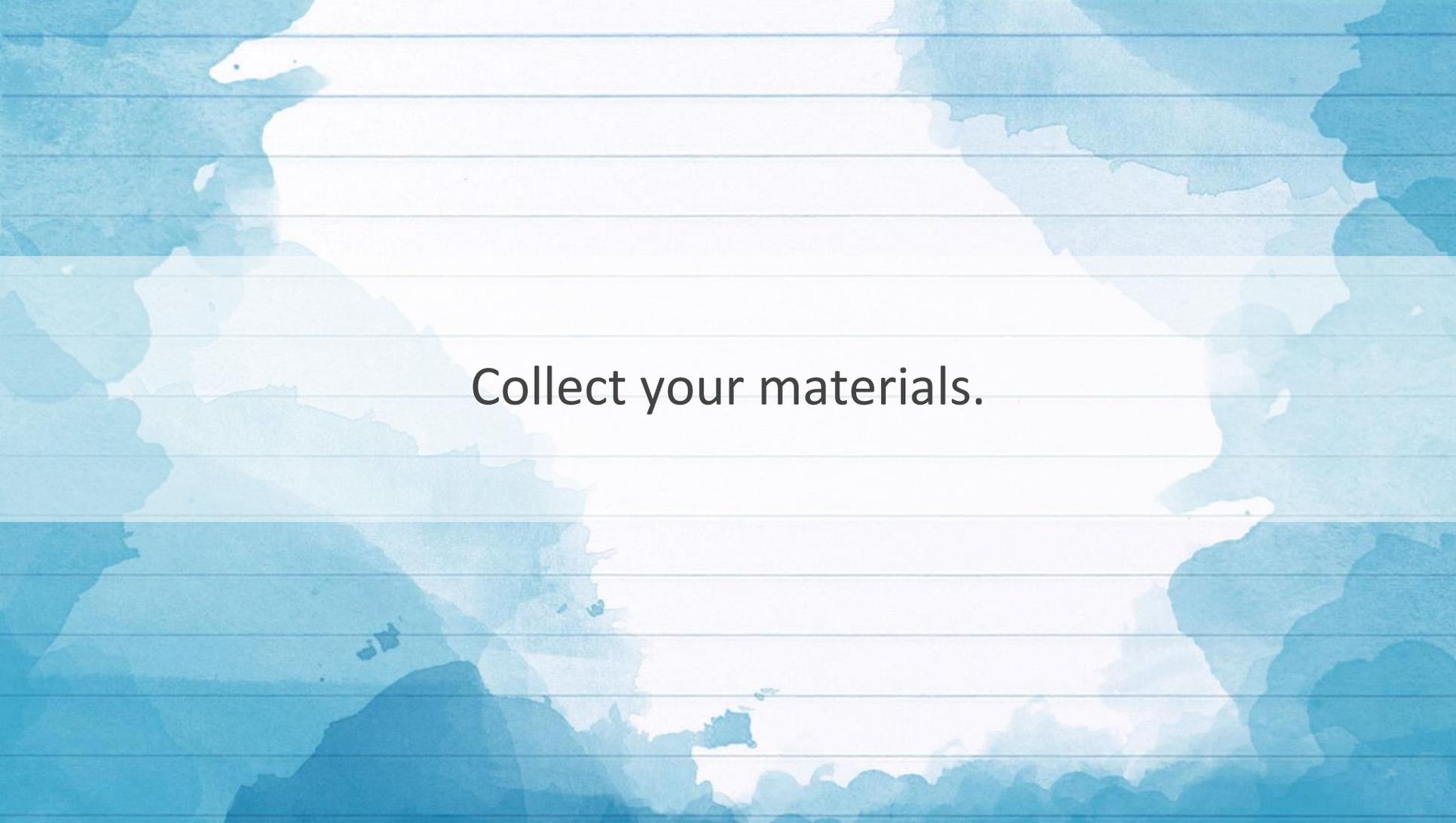
# Important Prerequisite Math Standards Guidance for 2020-2021

In this training we will:

- learn about the [Louisiana Important Prerequisite Math Standards](#).
- experience two planning scenarios using the new document;
- practice planning for “just in time” supports.

# You will need

- [Grade 7 Module 3 Teacher Edition](#)
- [Grade 7 Standards Remediation Guide](#)
- [Louisiana Guide to Implementing Grade 7 Eureka Math](#)
- [Grade 7 Diagnostic Mapping Document](#)
- [Louisiana Important Prerequisite Math Standards 2020-2021](#)



Collect your materials.

# Think

Take a few minutes and reflect on the approaches you are taking this year to make sure your students are prepared.

On a piece of paper list your go-to strategies.

We will refer to this note at the end of this presentation.

# Important Prerequisite Math Standards Guidance for 2020-2021

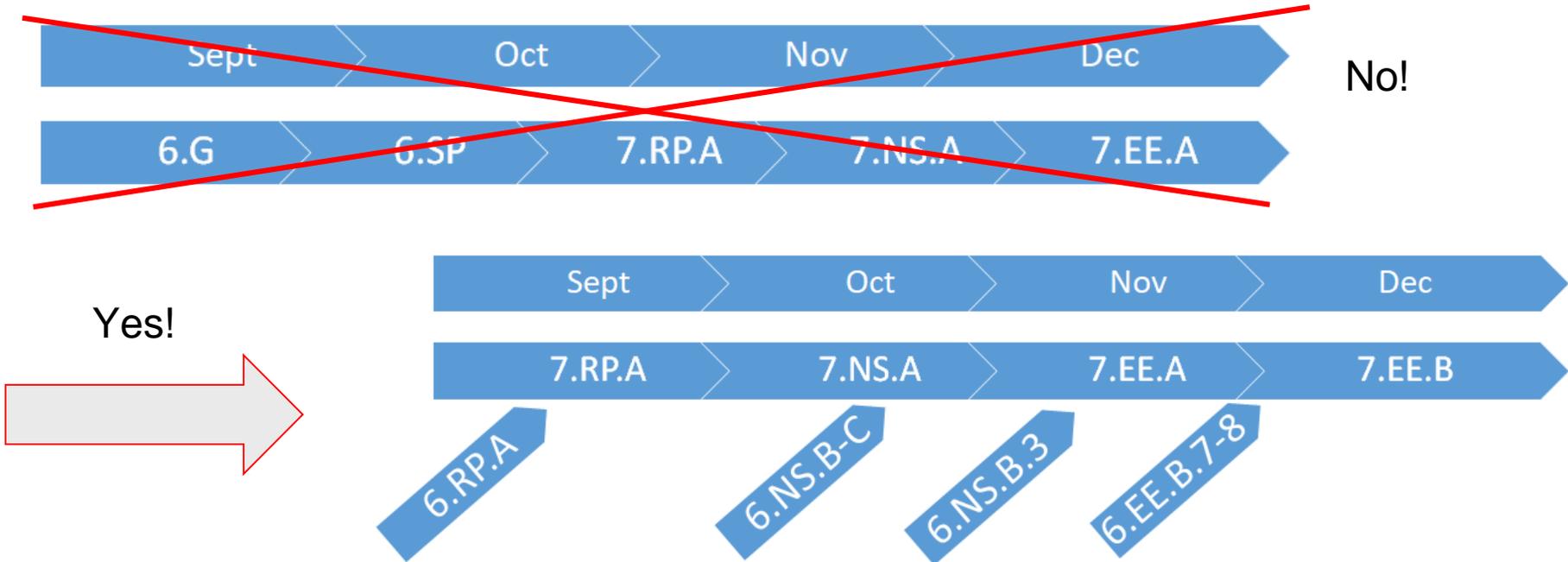
The Department, building on resources provided by the Achievement Network, has released Important Prerequisite Math Standards Guidance for teachers for the 2020-2021 school year.

This new document identifies:

- critical prerequisite math standards from previous grade levels needed to anticipate potential unfinished learning,
- suggestions for prioritizing content to save instructional time this year, and;
- aligned lessons for the most widely used Tier 1 curricula impacted by identified standards.

The purpose of this resource is to guide teachers' strategic decision making to address current and ongoing learning gaps through the 2020-2021 school year.

# Just in time support



# Important Prerequisite Math Standards Guidance for 2020-2021

Prerequisite Standard	Grade-Level Standard	Standard Language	Instructional Time	Eureka Math	Illustrative Math
	<ul style="list-style-type: none"> <li>7.EE.B.3 <i>Conceptual, Procedural, Application</i></li> </ul>	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i>			
	<ul style="list-style-type: none"> <li>7.EE.B.4 <i>Conceptual, Procedural, Application</i></li> </ul>	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.			
<ul style="list-style-type: none"> <li>6.EE.B.5,</li> <li>6.EE.B.6,</li> <li>6.EE.B.7</li> </ul>	<ul style="list-style-type: none"> <li>7.EE.B.4a <i>Conceptual, Procedural, Application</i></li> </ul>	Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i>	Emphasize equations (7.EE.B.4a) relative to inequalities (7.EE.B.4b).		
6.EE.B.8	<ul style="list-style-type: none"> <li>7.EE.B.4b <i>Conceptual, Procedural, Application</i></li> </ul>	Solve word problems leading to inequalities of the form $px + q > r$ , $px + q \geq r$ , $px + q < r$ , or $px + q \leq r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i>			
6.G.A.1, 6.G.A.3	<ul style="list-style-type: none"> <li>7.G.A.1 <i>Procedural, Application</i></li> </ul>	Solve problems involving scale drawings of geometric figures, such as computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Reduce time spent creating scale drawings by hand.	1.16, 1.17, 1.18, 1.19, 1.20 (E), 1.21, 1.22, 4.12, 4.13, 4.14, 4.15	7.1.1, 7.1.2, 7.1.3, 7.1.4, 7.1.5, 7.1.6, 7.1.7, 7.1.8, 7.1.9, 7.1.10, 7.1.11, 7.1.12, 7.1.13, 7.2.1, 7.3.6, 7.3.11, 7.9.4, 7.9.13

# Sample Planning Grade 7 Module 3

## **Pelican Middle School**

Seventh Week of School

A/B Hybrid Schedule

Completed Module 1

## **Alligator Junior High**

Eleventh Week of School

A/B Hybrid Schedule for 9 weeks, Full student body returned to class week 10

Completed Module 2, Topic A

You will need access to all of the materials listed on slide 3

# Identify Grade Level Standards - Module 3

## Module 3: Expressions and Equations

Lesson	Course Level Content Standards	Standards from other Grades	Action	Notes/Rationale for Action
3.1-A	7.EE.A.1*, 7.EE.A.2	6.EE.A.3, 6.EE.A.4	O	<ul style="list-style-type: none"> <li>These Lessons focus on applying properties of operations as strategies to add and subtract linear expressions which will lead to mastery of 7.EE.A.1.</li> </ul>
3.2-A	7.EE.A.1*	6.EE.A.3, 6.EE.A.4	O	
3.3-A	7.EE.A.1*		O	<ul style="list-style-type: none"> <li>This Lesson focuses on applying properties of operations as strategies to expand linear expressions which will lead to mastery of 7.EE.A.1.</li> </ul>
3.4-A	7.EE.A.1		O	
3.5-A	7.EE.A.1*		O	<ul style="list-style-type: none"> <li>This Lesson focuses on applying properties of operations as strategies to add, subtract, and expand linear expressions which will lead to mastery of 7.EE.A.1.</li> </ul>
3.6-A	7.EE.A.1*, 7.EE.A.2		O	<ul style="list-style-type: none"> <li>This Lesson includes applying properties of operations as strategies to add, subtract, and expand linear expressions which will lead to mastery of 7.EE.A.1.</li> </ul>

# See the LA Important Prerequisite Standards

6.EE.A.2a-b, 6.EE.A.3, 6.EE.A.4	<ul style="list-style-type: none"> <li>7.EE.A.1 <i>Conceptual, Procedural</i></li> </ul>	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients to include multiple grouping symbols (e.g., parentheses, brackets, and braces).			
	<ul style="list-style-type: none"> <li>7.EE.A.2 <i>Conceptual</i></li> </ul>	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, <math>a + 0.05a = 1.05a</math> means that "increase by 5%" is the same as "multiply by 1.05."</i>			
	<ul style="list-style-type: none"> <li>7.EE.B.3 <i>Conceptual, Procedural, Application</i></li> </ul>	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i>			
	<ul style="list-style-type: none"> <li>7.EE.B.4 <i>Conceptual, Procedural, Application</i></li> </ul>	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.			
6.EE.B.5, 6.EE.B.6, 6.EE.B.7	<ul style="list-style-type: none"> <li>7.EE.B.4a <i>Conceptual, Procedural, Application</i></li> </ul>	Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, The perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i>	Emphasize equations (7.EE.B.4a) relative to inequalities (7.EE.B.4b).		
6.EE.B.8	<ul style="list-style-type: none"> <li>7.EE.B.4b <i>Conceptual, Procedural, Application</i></li> </ul>	Solve word problems leading to inequalities of the form $px + q > r$ , $px + q \geq r$ , $px + q < r$ , or $px + q \leq r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i>			

# Review progression of the lessons

## Expressions and Equations

### Module Overview .....

#### Topic A: Use Properties of Operations to Generate Equivalent Expressions (7.EE.A)

Lessons 1–2: Generating Equivalent Expressions.....

Lessons 3–4: Writing Products as Sums and Sums as Products .....

Lesson 5: Using the Identity and Inverse to Write Equivalent Expressions.....

Lesson 6: Collecting Rational Number Like Terms.....

#### Topic B: Solve Problems Using Expressions, Equations, and Inequalities (7.EE.B.3,

Lesson 7: Understanding Equations .....

Lessons 8–9: Using If-Then Moves in Solving Equations .....

Lessons 10–11: Angle Problems and Solving Equations.....

Lesson 12: Properties of Inequalities .....

Lesson 13: Inequalities .....

Lesson 14: Solving Inequalities .....

Lesson 15: Graphing Solutions to Inequalities .....

#### Topic C: Use Equations and Inequalities to Solve Geometry Problems (7.G.B.4, 7.G.B.6) .....

Lesson 16: The Most Famous Ratio of All.....

Lesson 17: The Area of a Circle.....

Lesson 18: More Problems on Area and Circumference .....

Lesson 19: Unknown Area Problems on the Coordinate Plane.....

Lesson 20: Composite Area Problems .....

Lessons 21–22: Surface Area .....

Lessons 23–24: The Volume of a Right Prism .....

Lessons 25–26: Volume and Surface Area.....

# Review Diagnostic Mapping Data

Module	Aligned LEAP 360 Diagnostic Item(s)
Module 1: Ratios and Proportional Relationships	1, 8, 10, 13, 17, 19, 23, 24, 33, 35, 37, 39, 44
Module 2: Rational Numbers	2, 4, 5, 7, 9, 12, 16, 18, 20, 21, 25, 28, 29, 32, 43
Module 3: Expressions and Equations	3, 6, 11, 14, 15, 22, 26, 27, 30, 31, 36, 38, 42

6.EE.A.3

6, 15, 22, 31

6.EE.A.4

3, 4, 27

6.EE.B.7

36, 38, 40, 42

6.EE.B.8

14, 26, 30

# Consider using the Eureka Remediation Tools

7 <sup>th</sup> Grade	
Module 1, Topic A	✓
Module 1, Topic B	✓
Module 1, Topic C	✓
Module 2, Topic A	✓
Module 2, Topic B	✓
Module 2, Topic C	✓
Module 3, Topic A	✓
Module 3, Topic B	✓
Module 3, Topic C	✓
Module 4, Topic A	✓

## Module 3 Topic A

- 6.EE.A.3
- 6.EE.A.4

## Module 3 Topic B

- 4.MD.C.7
- 6.EE.B.6
- 6.EE.B.7
- 6.EE.B.8

## Module 3 Topic C

- 6.G.A.1
- 6.G.A.2
- 6.G.A.3
- 6.G.A.4

# Decision Point

## What we know

- The content of Topic A and B are essential learning for students.
- The content of Topic C can be combined and deprioritized somewhat this year.
- We must look for opportunities to connect to 6.EE.A and 6.EE.B as within lesson scaffolds.
- Students will need a bridge up to 7.EE.B.4.b from 6.EE.B.8

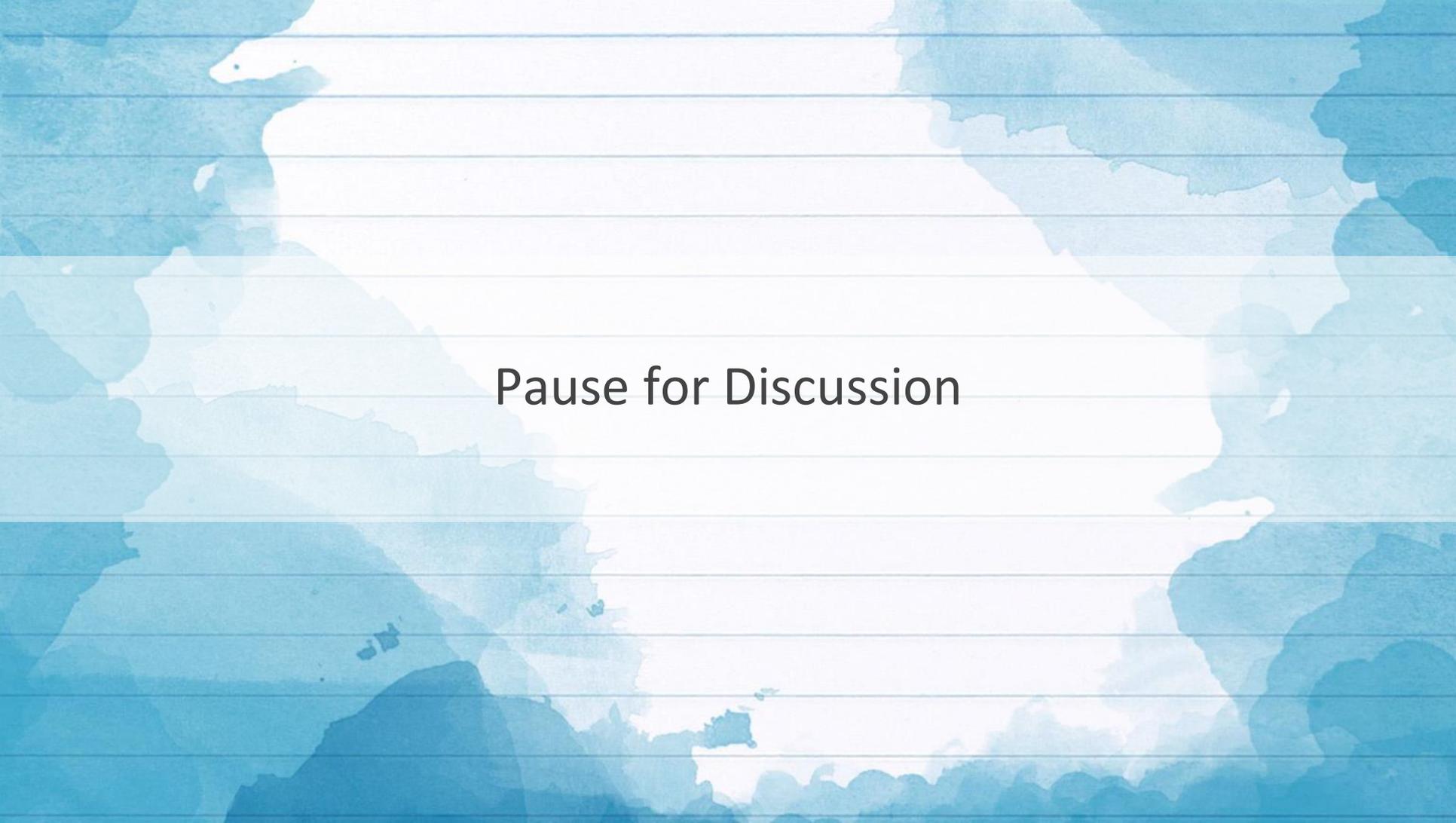
## What next?

- Are we on pace?
- Are the students ready?
- Which strategies, lessons or problems should we prioritize?
- When are we going to take action?
- What other data sources do we have?

# Classroom Scenario 1

Pelican Middle School is located in Southwest Louisiana. Today is November 13 which is about the 7th week of school. Students have been attending on an A/B rotation. The seventh grade team completed Module 1 today. The school year in the district is scheduled to end the last week of May. Normally, the module pacing would be in the twelfth week of school, beginning Module 3. Student Diagnostic Data is below listed in percent correct.

6.EE.A.3	6.EE.A.4	6.EE.B.7	6.EE.B.8
30% distributive property 80% adding monomials	50% simplifying expressions 20% division of decimal numbers	60% inequalities	80% connecting the inequality to the number line graph.

The background of the slide is a watercolor-style illustration. It features a central white area that tapers towards the top and bottom, creating a shape reminiscent of a speech bubble or a drop. This white area is surrounded by various shades of blue, from light sky blue to deep, dark teal. The colors are blended and layered, giving the background a soft, artistic, and textured appearance.

Pause for Discussion

# Classroom Scenario 1

Pelican Middle School is located in Southwest Louisiana. Today is November 13 which is about the 7th week of school. Students have been attending on an A/B rotation. The seventh grade team completed Module 1 today. The school year in the district is scheduled to end the last week of May. Normally, the module pacing would be in the twelfth week of school, beginning Module 3. Student Diagnostic Data is below listed in percent correct.

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30% distributive property 80% adding monomials	50% simplifying expressions 20% division of decimal numbers	60% inequalities	80% connecting the inequality to the number line graph.

# Action Plan Pelican Middle School

7 <sup>th</sup> Grade	
Module 1, Topic A	✓
Module 1, Topic B	✓
Module 1, Topic C	✓
Module 2, Topic A	✓
Module 2, Topic B	✓
Module 2, Topic C	✓
Module 3, Topic A	✓
Module 3, Topic B	✓
Module 3, Topic C	✓
Module 4, Topic A	✓

## Module 3 Topic A

- 6.EE.A.3
- 6.EE.A.4

## Module 3 Topic B

- 4.MD.C.7
- 6.EE.B.6
- 6.EE.B.7
- 6.EE.B.8

## Module 3 Topic C

- 6.G.A.1
- 6.G.A.2
- 6.G.A.3
- 6.G.A.4

# Action Plan for Pelican Middle School

## Expressions and Equations

### Module Overview

Topic A: Use Properties of Operations to Generate Equivalent Expressions (7.EE.A)

Lessons 1–2: Generating Equivalent Expressions

Lessons 3–4: Writing Products as Sums and Sums as Products

Lesson 5: Using the Identity and Inverse to Write Equivalent Expressions

Lesson 6: Collecting Rational Number Like Terms

Topic B: Solve Problems Using Expressions, Equations, and Inequalities (7.EE.B.3)

Lesson 7: Understanding Equations

Lessons 8–9: Using If-Then Moves in Solving Equations

Lessons 10–11: Angle Problems and Solving Equations

Lesson 12: Properties of Inequalities

Lesson 13: Inequalities

Lesson 14: Solving Inequalities

Lesson 15: Graphing Solutions to Inequalities

Topic C: Use Equations and Inequalities to Solve Geometry Problems (7.G.B.4, 7.G.B.6)

✓ Lesson 16: The Most Famous Ratio of All

Lesson 17: The Area of a Circle

Lesson 18: More Problems on Area and Circumference

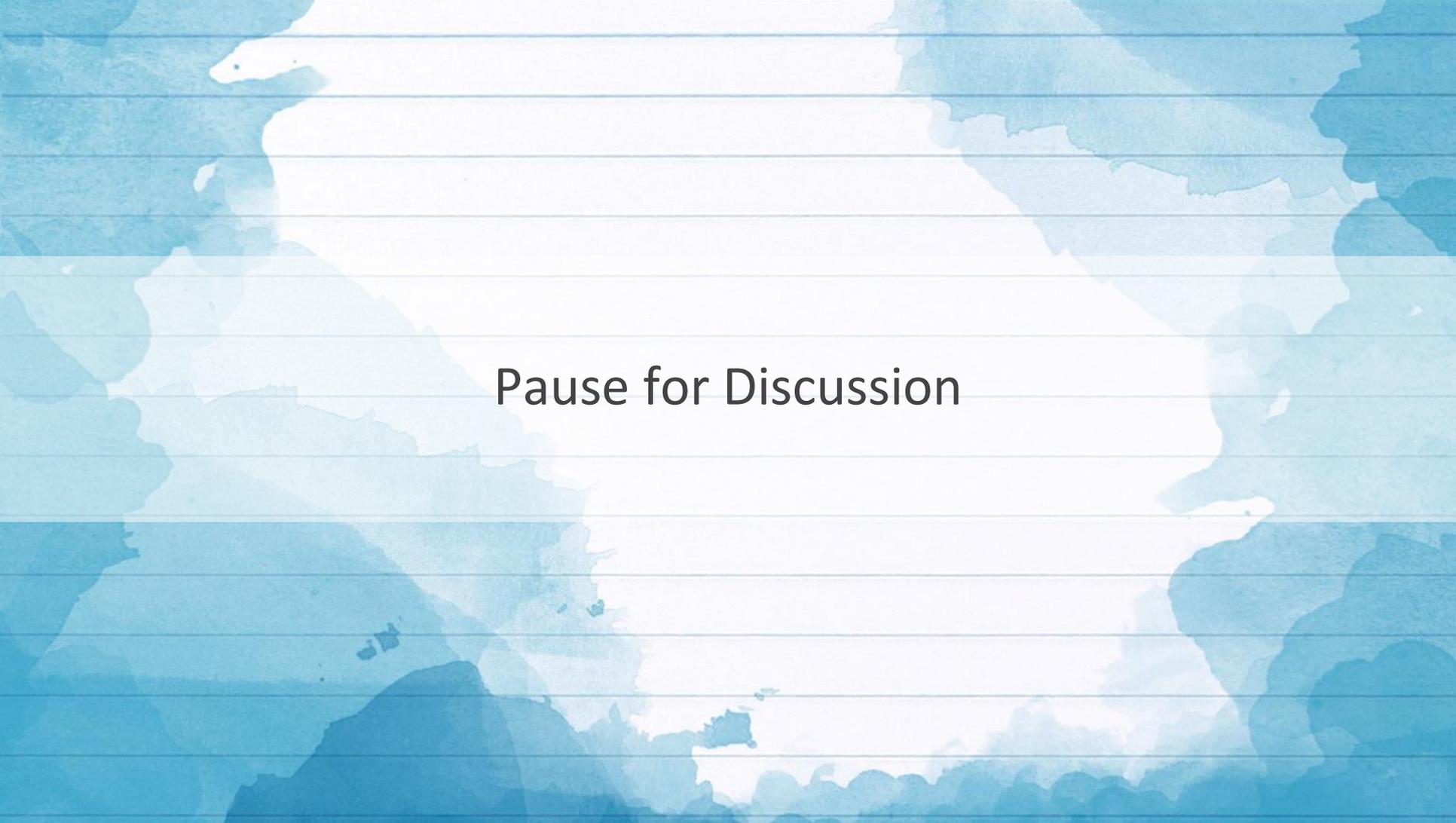
✓ Lesson 19: Unknown Area Problems on the Coordinate Plane

✓ Lesson 20: Composite Area Problems

Lessons 21–22: Surface Area

Lessons 23–24: The Volume of a Right Prism

~~Lessons 25–26: Volume and Surface Area~~

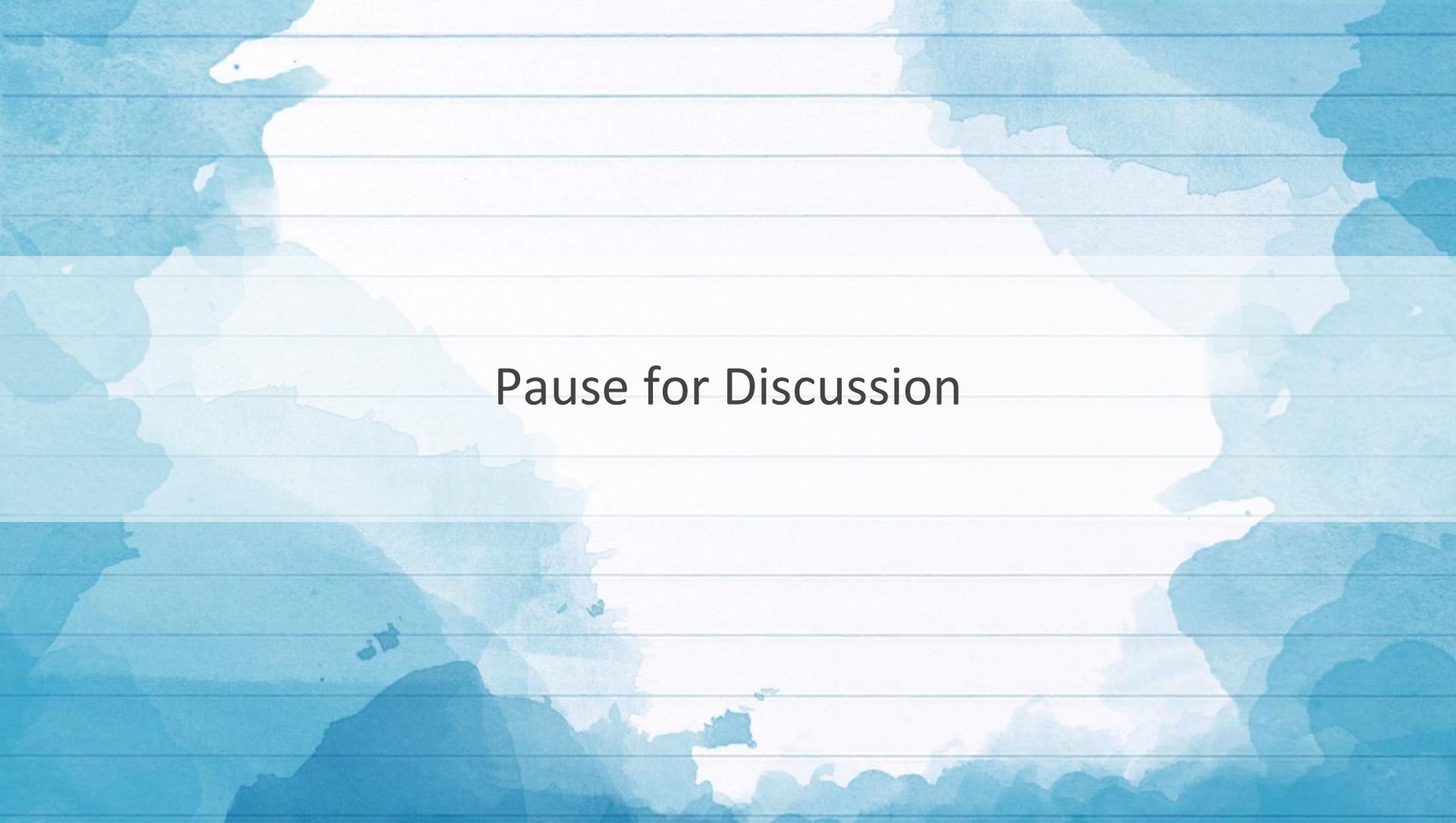
The background of the slide is a watercolor-style wash of various shades of blue and white. The colors are blended and layered, creating a soft, artistic texture. The text is centered in the white space.

Pause for Discussion

## Classroom Scenario 2

Alligator Junior High is located in north Louisiana. Students attended a hybrid model, but returned to school week 10. Today is November 13 which is about the 11th week of school. Seventh grade students were just assessed on the Topic A of Module 2. The school year in the district is scheduled to end the last week of May. In a normal year, teachers would be beginning Module 3.

6.EE.A.3	6.EE.A.4	6.EE.B.7	6.EE.B.8
32% distributive property 75% adding monomials	50% simplifying expressions 20% division of decimal numbers	60% inequalities	80% connecting the inequality to the number line graph.

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Pause for Discussion

# Classroom Scenario 2

Alligator Junior High is located in north Louisiana. Students attended a hybrid model, but returned to school week 10. Today is November 13 which is about the 11th week of school. Seventh grade students were just assessed on the Topic A of Module 2. The school year in the district is scheduled to end the last week of May. In a normal year, teachers would be beginning Module 3.

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32% distributive property 75% adding monomials	50% simplifying expressions 20% division of decimal numbers	60% inequalities	80% connecting the inequality to the number line graph.

# Action Plan Alligator Junior High

7 <sup>th</sup> Grade	
Module 1, Topic A	✓
Module 1, Topic B	✓
Module 1, Topic C	✓
Module 2, Topic A	✓
Module 2, Topic B	✓
Module 2, Topic C	✓
Module 3, Topic A	✓
Module 3, Topic B	✓
Module 3, Topic C	✓
Module 4, Topic A	✓

## Module 3 Topic A

- 6.EE.A.3
- 6.EE.A.4

## Module 3 Topic B

- 4.MD.C.7
- 6.EE.B.6
- 6.EE.B.7
- 6.EE.B.8

## Module 3 Topic C

- 6.G.A.1
- 6.G.A.2
- 6.G.A.3
- 6.G.A.4

# Action Plan for Alligator Junior High

## Expressions and Equations

### Module Overview

Topic A: Use Properties of Operations to Generate Equivalent Expressions (7.EE.A)

Lessons 1–2: Generating Equivalent Expressions

Lessons 3–4: Writing Products as Sums and Sums as Products

Lesson 5: Using the Identity and Inverse to Write Equivalent Expressions

Lesson 6: Collecting Rational Number Like Terms

Topic B: Solve Problems Using Expressions, Equations, and Inequalities (7.EE.B.3)

Lesson 7: Understanding Equations

Lessons 8–9: Using If-Then Moves in Solving Equations

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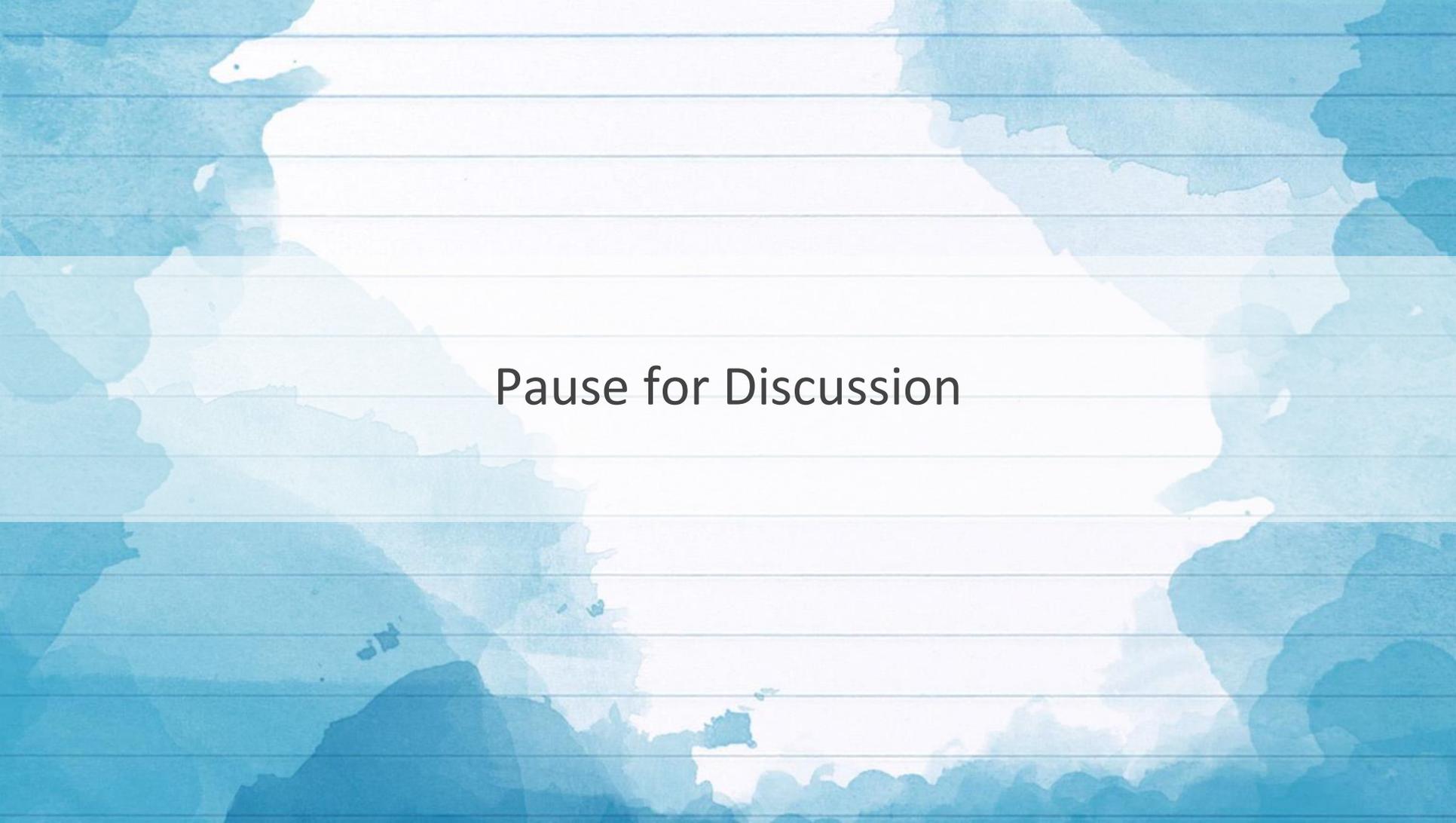
✓ Lesson 19: Unknown Area Problems on the Coordinate Plane

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Lessons 21–22: Surface Area

Lessons 23–24: The Volume of a Right Prism

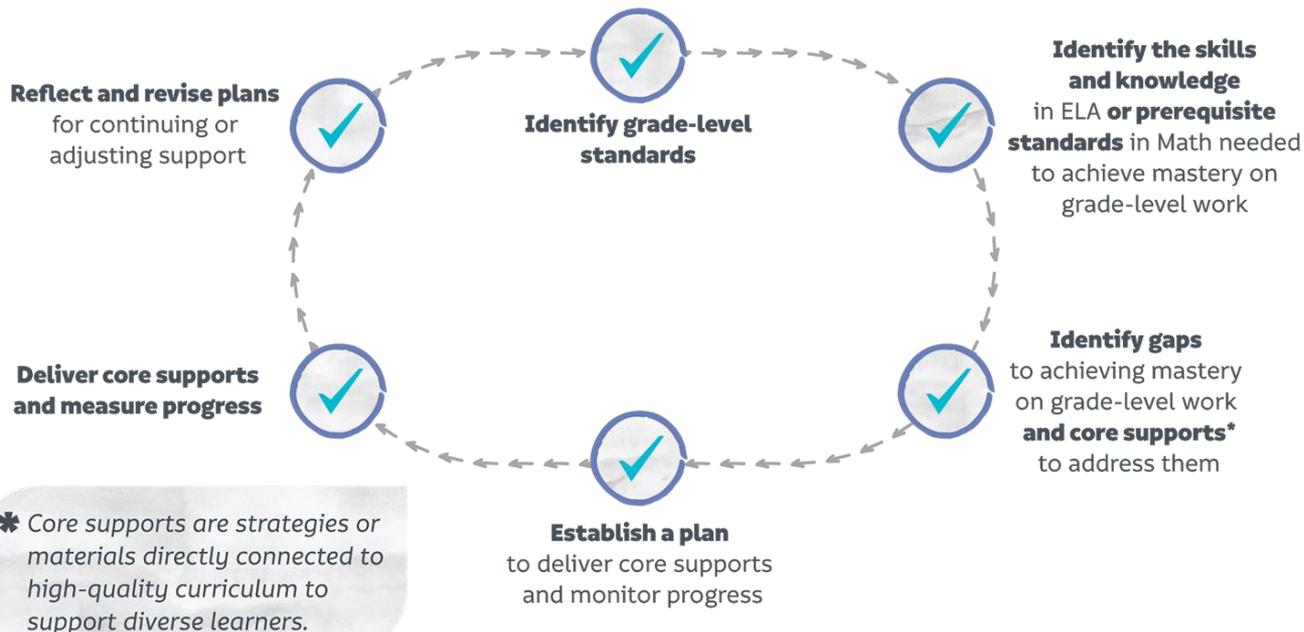
Lessons 25–26: Volume and Surface Area

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Pause for Discussion

# Diverse Learners Cycle

## *Diverse Learners Cycle Across Content Areas*



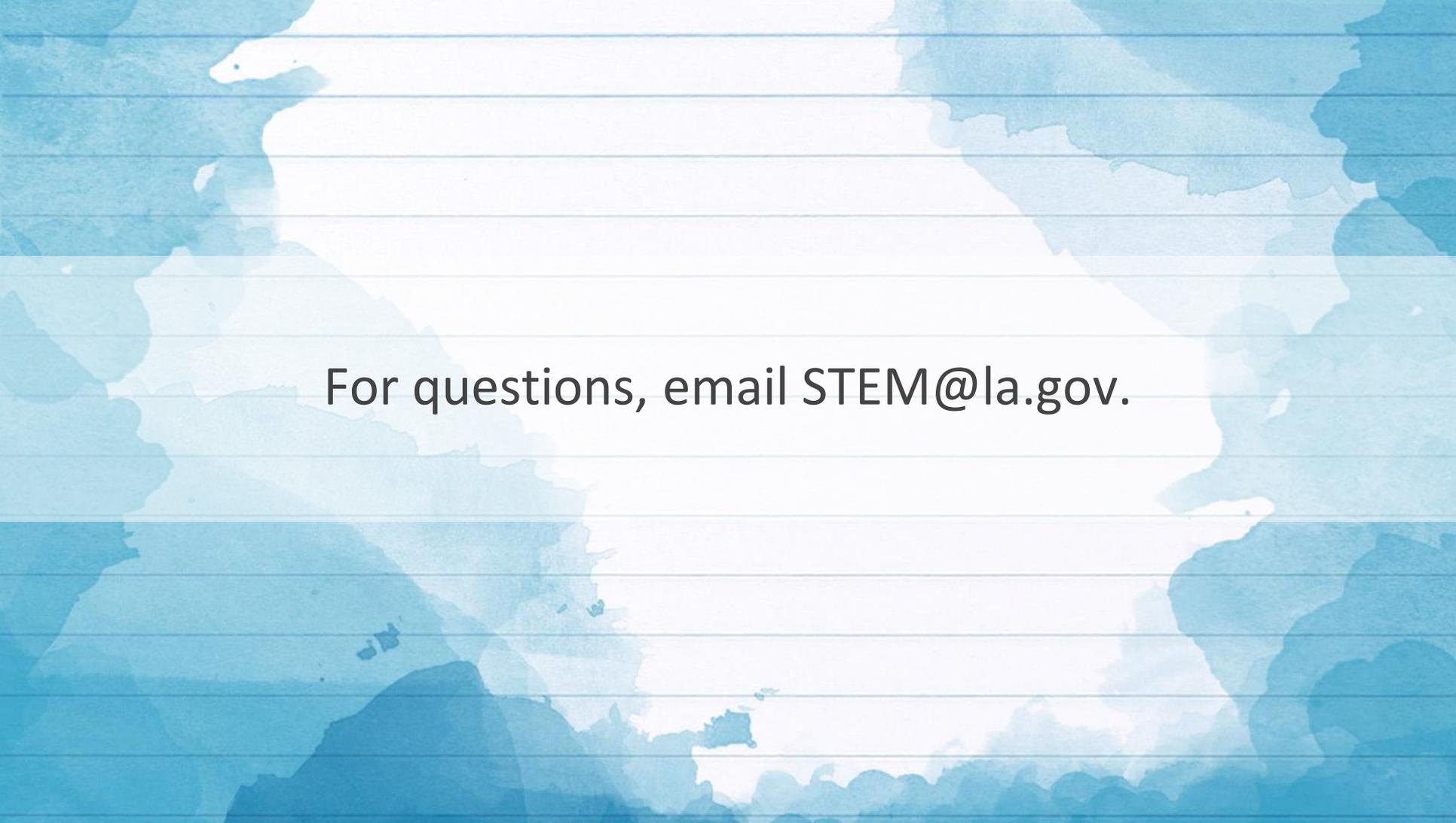
## Next steps

- Continue to plan with the lense of readiness.
- Be willing to flex and adapt your plan.
- Keep good notes!!

# Reflect

Find your list of go-to strategies and reflect on these questions:

- How does your original list compare to what we have learned today?
- What do you commit to trying out in your classroom?

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For questions, email [STEM@la.gov](mailto:STEM@la.gov).